

VOL. IV.

MAY, 1906

NOS. 57-58

MYCOLOGICAL BULLETIN

W. A. KELLERMAN, Ph. D.

OHIO STATE UNIVERSITY



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Mycological Bulletin

Nos. 67-58

*W. A. Kellerman, Ph. D., Ohio State University
Columbus, Ohio, May, 1906*

THE EDITOR'S UNEASY CHAIR.

The conspicuous change in the MYCOLOGICAL BULLETIN as witnessed in this number may raise the question, "What does it mean?" I despair of giving an adequate answer—but let us hope at least that it means progression—we will say "mutation," for you know, my dear reader, that the "mutation theory" (sudden strides) is now replacing the "evolution theory" (slow changes)—which we all had begun to think explained the universe so nicely!

Perhaps we would better say in simple plain, current language that the editor concluded he was not "the whole thing," in short, he was not "it," and so he yields nearly all the space now and henceforth to other writers, to authors who know much about their subject, who have information to spare, and who kindly write for the joy of the working. This paragraph, then, is one of felicitation and congratulation, because we will have a better MYCOLOGICAL BULLETIN than heretofore. What an advantage it was that we were "held up" by the—(see the next paragraph.)

But the immediate and efficient cause for this change has not yet, as just hinted, been exposed. It is to be found in the gentle, kindly, peremptory notice from the postal authorities, that "second class entry" is for newspapers, for literary and scientific magazines, for technical journals, containing articles written by various persons," &c., and consequently the copies of the BULLETIN were not sent out in the manner heretofore in vogue. A delay was therefore caused, since the editor was hunting mushrooms in a foreign country all winter, and consequently prompt measures could not be taken for distribution in other manner—stamping each copy (and herein consists the apology or explanation of an irregularity that presumably will not occur again).

Then we make the "new announcement," namely, that the BULLETIN will be continued on the plan so far exemplified in the successive Numbers; but it is advantageous to mail monthly instead of fortnightly as heretofore. Double numbers will be issued the remainder of the year, thus giving a total of twenty-four for the twelve months as promised. The use of a cover to the magazine will, it is surmised, add to its appearance, besides serving well for protection. A wide circulation would be desirable—to the end that the expense may be met by subscriptions. The price, 25 cents a year, will remain unchanged.

THE GENUS PEZIZA AND PEZIZA COCCINEA.

By Supt. M. E. Hard, Chillicothe, Ohio.

This is a very large genus, and will be met by the mushroom hunter frequently. Many are so small that they will easily escape detection unless special pairs are taken to find them. They are found on leaves, on partially buried sticks, on decayed logs, on dung, in cellars, about barns and outhouses, on the stems of herbaceous plants, especially on the nettle.

There are about 150 species found in this country, and many reported in Europe not as yet found here. They belong to the true cup fungi. Many are sessile, while others have stems. They are usually fleshy and soft and of a variety of colors.

They have a peculiar explosive apparatus for hurling out the spores so that the wind can better scatter them abroad.

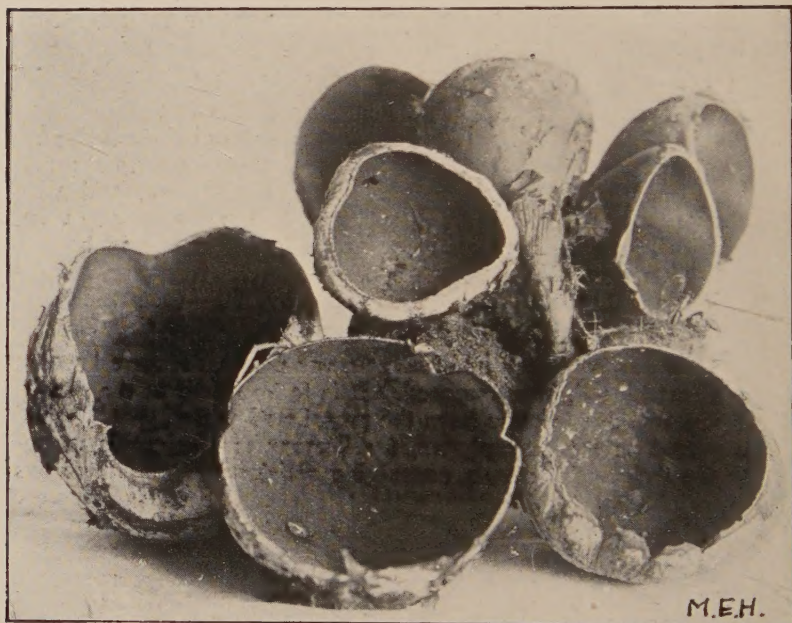


Fig. 177. PE-ZI-ZA COC-CIN'E-A. Scarlet within. M. E. Hard, Chillicothe, O.

The fruiting surface is usually saucer or cup-shaped and the bowl of the saucer, which is the fruiting surface, is completely filled with a palisade of cylindrical sacs and in each sac there are eight spores. These sacs have lids at the apex and when the plant is mature they spurt out their spores. If the observer will lie down on the ground and watch a matured cup for a few minutes he will see very distinctly a small cloud of spores thrown off at intervals without his disturbing the plant in the least, but should he disturb the plant just a little he will plainly see a large cloud of spores from the jar. I have taken them into schoolrooms after having been kept for two or three days and by a slight jar the cloud of spores would be visible to the entire room. A number of the cup fungi has this explosive apparatus.

Those in Figure 177 are called PEZIZA COCCINEA Jacq. It is found in damp places in the spring of the year from April to June. However, I

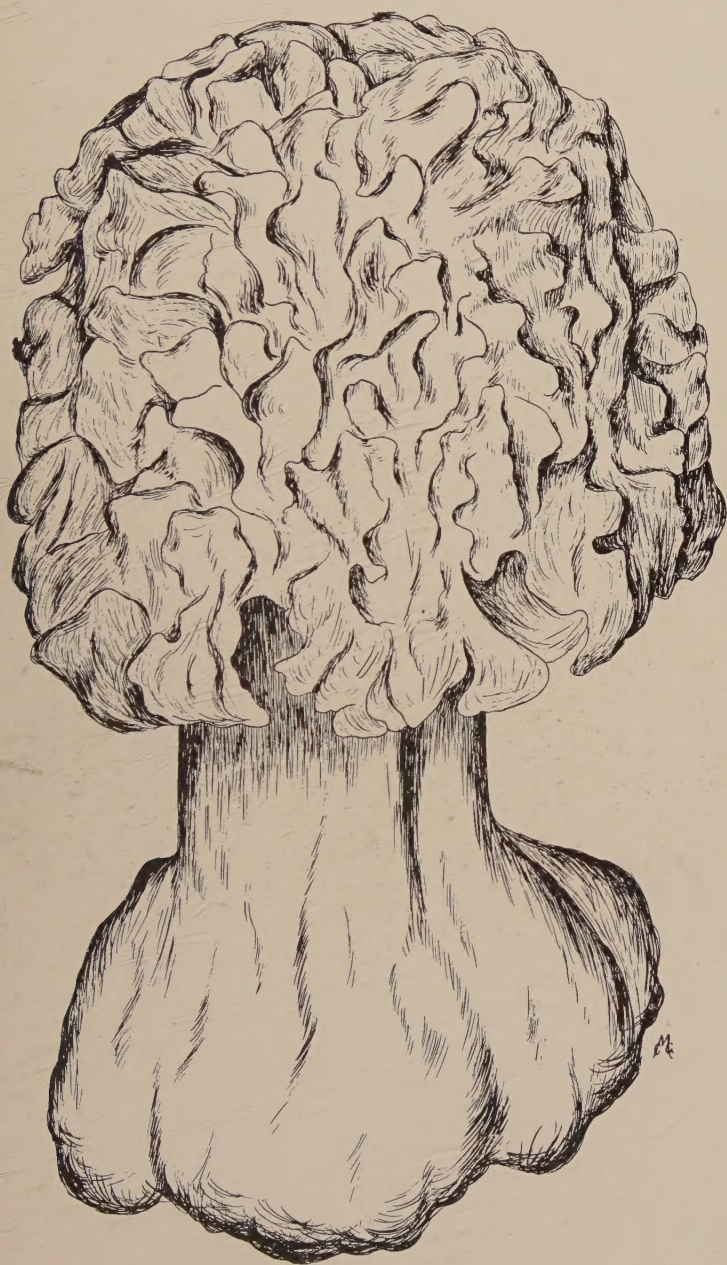


Fig. 178. Sketch of *GY-RO-MI'TRA ES-CU-LEN'-TA*, slightly reduced. Specimen sent by M. E. Hard. See p. 230.

have found it late in November. It is found on sticks partially buried in the leaves. It is easily distinguished by its deep scarlet color, which gives name to the species. Its external surface is whitish or pinkish and inclined to be tomentose. The stem is short, whitish and tomentose.

This is one of the most beautiful plants in the woods, and dull must be the observer who will not pause to examine this brilliant fungus, truly a "Fairy Cup."

It is very abundant in the woods about Chitticothe this spring, yet its distribution is widespread.

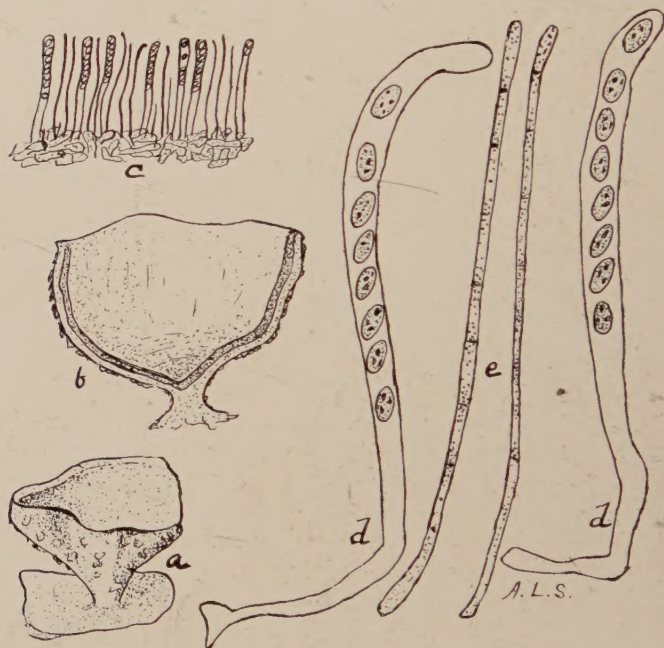


Fig. 179. PE-ZI'-ZA COC-CIN'-E-A. showing plant (a); section of plant (b); portion of the red fruiting layer (c); two asci, each ascus with eight spores (d); and two paraphyses (e).

MUSHROOM NOTES. I.

W. A. Kellerman.

VARIATION IN URNULA CRATERIUM.—We present some illustrations of *Urnula craterium*, Figs. 180 and 182, to show the great variation in shape and size of these black plants. One could well believe that more than one species was represented; but specimens have been submitted from time to time to Dr. Durand, of Cornell University, and the reports from him show that all the forms belong to the species named above—*Urnula craterium*.

It is one of the commonest and one of the earliest to appear in the season. In the partially cleared woods, where twigs and branches in abundance have been decaying for some time, it luxuriates most profusely.



Fig. 180. UR'-NU-LA CRA-TE'-RI-UM, Black Peziza, slender, densely clustered forms.
R. F. Grigs, Columbus, O.

The very dark brown or rather dull black color simulates that of the soil, decaying wood, blackened leaves, etc., on which it feeds.

The shapes assumed can better be seen than described—so I will refer to the samples shown in the half tones. In Fig. 180 we have a large densely cespitose cluster of the slender forms cornucopia-like. A different type is shown in Fig. 180. These illustrations were made from specimens collected at Columbus by Mr. R. F. Griggs and at Cable by Mr. Arthur L. Smith.

A LARGE *GYROMITRA ESCULENTA*.—In Fig. 178 we show a sketch of a specimen of this species kindly sent by Supt. M. E. Hard, of Chillicothe,

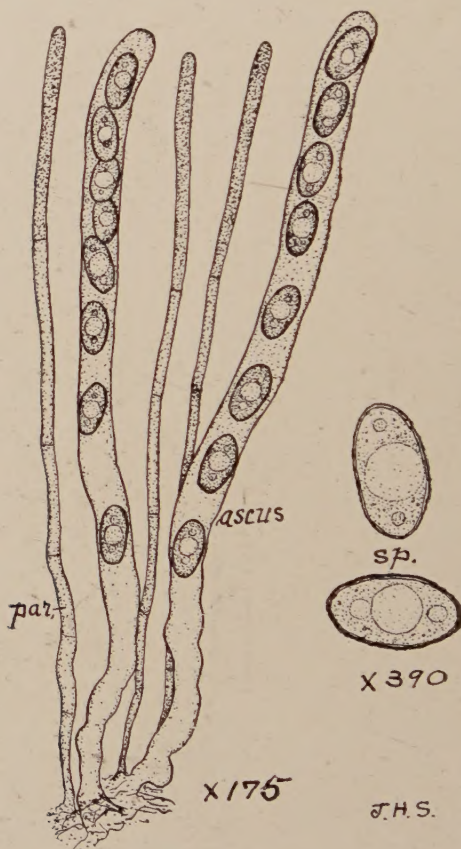


Fig. 181. Asci, spores and paraphyses of *GY-RO-MITRA ES-CU-LEN'-TA*, enlarged.

Ohio, which weighed 520 grams, or over one pound. The actual size is shown in the cut, or really we had to reduce it slightly to avoid projection beyond the page. I have requested Mr. Hard to give us some notes on this interesting edible species, and next month we hope to hear from him; doubtless he will furnish a photograph for illustration at the same time. In the meantime I have had the fruiting-surface examined and accurate drawings made showing the *asci*, *paraphyses* and *spores*; see Fig. 181.



Fig. 182. UR'NU-LA CRA-TE'-RI-UM, Black Peziza, short-stemmed forms, collected at Cable, O., by Arthur L. Smith.

AN EARLY MUSHROOM — NAUCORIA PEDIADES Fr.

Arthur L. Smith, Columbus, Ohio.

This is the first mushroom of the season. It was found April 3, 1906, growing on twigs and in the grass. Even then some of the specimens showed signs of old age and decay. The plant was found in considerable abundance on April 15, after a warm rain; later but two or three were found.

Naucoria belongs to the Ochre-Spored Agarics, and corresponds to *Collybia* among the White-Spored species. Indeed, on cursory examination, one would be almost sure to call it *Collybia*.

Atkinson says for the description of the genus, "Gills free or attached, but not decurrent, and stem is cartilaginous." But he does not mention this interesting little species. McIlvaine gives a longer description of the genus, and lists also this species. In my specimens, the pileus was two or three cm. broad, and quite irregular in shape. It varies from convex when young, to flat or even reflexed when older.

The color of the pileus varies with the dryness. Most of the specimens grew in moist places, and were a medium brown color. But those that were dry on the surface and those that dried out afterwards were a quite light brown. The contrast was marked. If the dry plants were wet, they soon returned to the deeper brown. All parts of the plants were of nearly the same color as the wet pileus. The spore print is ferruginous, while the individual spores are 6×4 mic. The hollow subcartilaginous stem is irregular and often flattened.

Supt. M. E. Hard, to whom specimens were sent, says, "It is without doubt '*Naucoria pediaes* Fr.', and is edible." I did not test its edible qualities, but did find when raw the taste insipid. The illustration, Fig. 183, represents two of these plants in their native habitat.



Fig. 183. NAU-co'-RI-A PE-di'-A-DES. For description see text.


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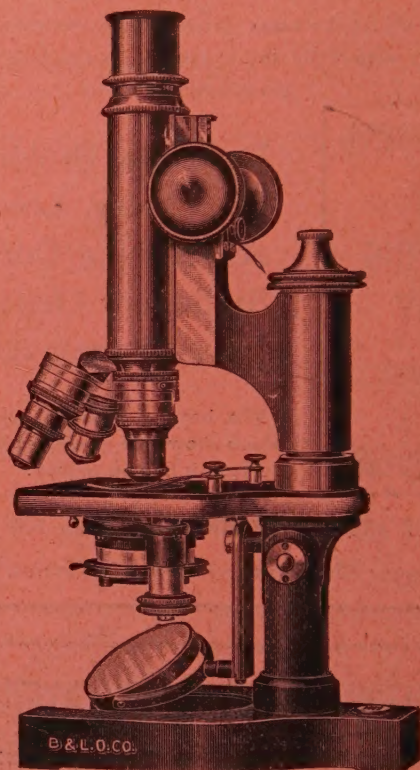
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